



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,677	03/18/2004	Timothy G. Offerle	81095828 (36190-24)	2676
28549	7590	12/11/2008	EXAMINER	
Dickinson Wright PLLC 38525 Woodward Avenue Suite 2000 Bloomfield Hills, MI 48304			SCHWARTZ, CHRISTOPHER P	
			ART UNIT	PAPER NUMBER
			3657	
			MAIL DATE	DELIVERY MODE
			12/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/708,677
Filing Date: March 18, 2004
Appellant(s): OFFERLE ET AL.

Jerome R. Drouillard
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 17, 2008 appealing from the Office action mailed June 6, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,461,357	YOSHIOKA et al.	10-1995
6,587,760	OKAMOTO	7-2003

Art Unit: 3657

7,089,101	FISCHER et al.	8-2006
WO 2004/007232 A1	FISCHER et al.	1-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-27, 29, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto '760 in view of the WO 2004/007232 publication to Fischer (WO '232).

Regarding claims 1, 12, 21 Okamoto discloses a parking assist system for backing of a vehicle and states in the abstract that "A vehicle image VI is superposed on a desired parking position of the vehicle in the rear area image FI, and a predicted

Art Unit: 3657

vehicle route image TR1 is generated within the predetermined area based on a steering angle and an initial position of the vehicle, while an actual vehicle route image TR2 is generated based on actual steering angles and positions of the vehicle.”. As discussed in col. 1 lines 40-43 this system uses a display screen. Note the “reverse direction signal” is generated when the vehicle is simply put into “reverse”, via the transmission shift lever, i.e. transmission controller, at which point the rear-view picture is generated on the display screen.

Lacking in Okamoto is a specific discussion of using the system with a trailer.

The reference to Fischer WO '232 discusses in columns 9 and 10 (of the patent) that such parking assist systems (using an “optical display”) can be used with trailers. See col. 9 lines 43-45. At the top of column 10 Fischer et al. states that the trailer angle between the vehicle and the trailer can be registered by means of trailer angle sensors known per se. On lines 4-7 of col. 10 Fischer et al. states that “during the driving maneuver, the **steering wheel position** which the driver has to set in order that the actually registered trailer angle B_{act} corresponds to the desired trailer angle B_{des} is displayed to the driver.”. Fischer et al. Uses brake steer to bring the actual trailer angle into conformance with the desired trailer angle. See col. 9 lines 15-27 and col. 10 lines 13-20.

One having ordinary skill in the art at the time of the invention would have found it obvious to have modified the system of Okamoto to include the ability to park the vehicle while towing a trailer, as taught by Fischer et al., since many sport utility

Art Unit: 3657

vehicles include the option of equipping them with a towing package and this modification would expand the capability of such a towing vehicle.

The limitations of the rest of the claims are taught by the combined teachings of the references above and what is well known in the art.

4. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto '760 in view of WO '232, as applied to claim 21 above, and further in view of Yoshioka et al. '357.

Regarding claim 28 Okamoto '760, as modified, lacks using an ultrasonic sensor for the detection of a distance to an object.

Yoshioka et al. '357 teaches this at 27. Note the other devices taught in Yoshioka et al. to assist driver navigation.

One having ordinary skill in the art at the time of the invention would have found it obvious to have further modified Okamoto '760 with an ultrasonic sensor to aid in object detection and assist the driver in avoiding a collision with such when backing up the trailer.

5. Claims 1-27, 29, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 2004/007232 publication to Fischer (WO '232) in view of Okamoto '760.

Regarding claims 1-27, 29, 30 WO '232 and Okamoto '760 are relied upon as above in that the device of Fischer et al. states in col. 9 lines 43-45 that system can be used with a trailer and that braking force is used to bring the actual trailer angle into conformance with a desired trailer angle.

Art Unit: 3657

Lacking in Fischer et al. is a specific discussion of sensing a current position of the trailer relative to the vehicle and, from this, determining a predicted position.

However, as previously explained, the reference to Okamoto teaches this known concept. See the abstract.

To have modified Fischer et al. with the concept taught by Okamoto would have been obvious to the ordinary skilled worker in the art as an obvious alternative equivalent means of determining the intended position of the trailer and displaying it to the driver on a display screen. This may make the parking of some types of trailers easier.

The limitations of the rest of the claims are taught by the combined teachings of the references above and what is well known in the art.

6. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO '232 in view of Okamoto '760 as applied to claim 21 above, and further in view of Yoshioka et al. '357.

Regarding claim 28 Fischer et al. '101, as modified, lacks using an ultrasonic sensor for the detection of a distance to an object.

Yoshioka et al. '357 teaches this at 27. Note the other devices taught in Yoshioka et al. to assist driver navigation.

One having ordinary skill in the art at the time of the invention would have found it obvious to have further modified Fischer et al. '101 with an ultrasonic sensor to aid in object detection and assist the driver in avoiding a collision with such when backing up the trailer.

(10) Response to Argument

Appellant's state at page 6 of the Brief that their invention is "... directed to a method and system for determining the predicted position of a trailer relative to a tow vehicle, based on the current position of the trailer with respect to the vehicle and the steering wheel angle. This predicted position is displayed within the vehicle, along with the current position of the trailer with respect to the vehicle".

Appellant's admit that the patent to Okamoto "teaches a system for displaying the [predicted position] of a vehicle and it's surroundings and an image on a screen".

Their position is then that Okamoto deals only with the positioning of the vehicle with respect to the outside world; not with respect to another vehicle.

Regarding the Fischer et al. reference appellant's admit on the last paragraph of page 6 that Fischer "... teaches a system which may be used for tracking the angle of a trailer with respect to a vehicle and that the actual angle is compared with a desired angle and the error is used to calculate a new steering angle which is displayed to the driver".

Appellant's argue that Fischer does not display the vehicle and the trailer to the driver. And according to appellant's the references are not properly combinable and any such combination of Okamoto with Fischer et al. would not lead to appellant's claimed invention, but would lead to only displaying the tow vehicle and no imminent jackknifing condition.

The examiner disagrees with appellant's conclusions that the references are not combinable and that such a combination does not lead to appellant's claimed invention.

Art Unit: 3657

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Okamoto '760 states in the abstract that "A vehicle image VI is superposed on a desired parking position of the vehicle in the rear area image FI, and a predicted vehicle route image TR1 is generated within the predetermined area based on a steering angle and an initial position of the vehicle, while an actual vehicle route image TR2 is generated based on actual steering angles and positions of the vehicle.". As discussed in col. 1 lines 40-43 this system uses a display screen.

Lacking in Okamoto is a specific discussion of using the system with a trailer.

Fischer WO '232 discusses in columns 9 and 10 (of the patent) that such parking assist systems (using an "optical display"—see claim 9) can be used **with trailers**. See col. 9 lines 43-45. At the top of column 10 Fischer et al. states that the trailer angle between the vehicle and the trailer can be registered by means of trailer angle sensors known per se. On lines 4-7 of col. 10 Fischer et al. states that "during the driving maneuver, the **steering wheel position** which the driver has to set in order that the actually registered trailer angle B_{act} corresponds to the desired trailer angle B_{des} is displayed to the driver.". Fischer et al. Uses brake steer to bring the actual trailer angle into conformance with the desired trailer angle. See col. 9 lines 15-27 and col. 10 lines 13-20. In claim 9 Fischer et al. claims that the "...steering wheel position to be set is

Art Unit: 3657

indicated by means... for optical driver information or means *for tactile driver information*".

Because Okamoto teaches a vehicle parking system displaying the predicted vehicle route image on a screen to a driver and the system to Fischer teaches a similar system that uses brake steer, steering and trailer angle sensors (see col. 9 line 43 over to column 10), that displays data to the driver but is also adapted for use with trailers, the references are properly combinable and any such combination would lead to a system that displays the predicted position of ***both vehicles and consequently any imminent jackknifing condition***. Clearly the system of Fischer is inherently capable of avoiding such a condition in light of the discussion in column 9 and what is claimed in claim 9. *Appellant's representative has interpreted the teachings of these references in a vacuum.*

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, many sport utility vehicles include the option of equipping them with a towing package and this modification (to Okamoto with Fischer) would expand the capability of such a vehicle that will be used to tow trailers.

Art Unit: 3657

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Christopher P. Schwartz

/Christopher P. Schwartz/

Primary Examiner, Art Unit 3657

Conferees:

Christopher P. Schwartz /Christopher P. Schwartz/

Primary Examiner, Art Unit 3657

Thomas J. Williams /T.J.W./

Lesley Morris /LDM/